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(54) Title: WEST NILE VIRUS VACCINE

(57) Abstract: A vaccine composition and method of administering same is provided that utilizes an isolated nucleic acid corresponding to substantially an entire Kunjin virus which upon administration to an animal is capable of eliciting a protective immune response to another, more pathogenic flavivirus such as West Nile virus NY 99 strain. The isolated nucleic acid may further encode at least one attenuating mutation in a Kunjin virus structural and/or non-structural protein. The isolated nucleic acid may be in the form of DNA linked to a promoter in a plasmid construct for expression *in vivo* or may be in the form of naked RNA or RNA packaged into VLPs. The composition and method may provide protective immunization of animals such as humans, equines and avians.

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